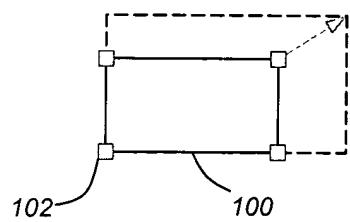


*FIG. 1*  
*(PRIOR ART)*



*FIG. 2*  
*(PRIOR ART)*

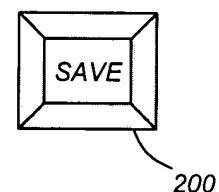
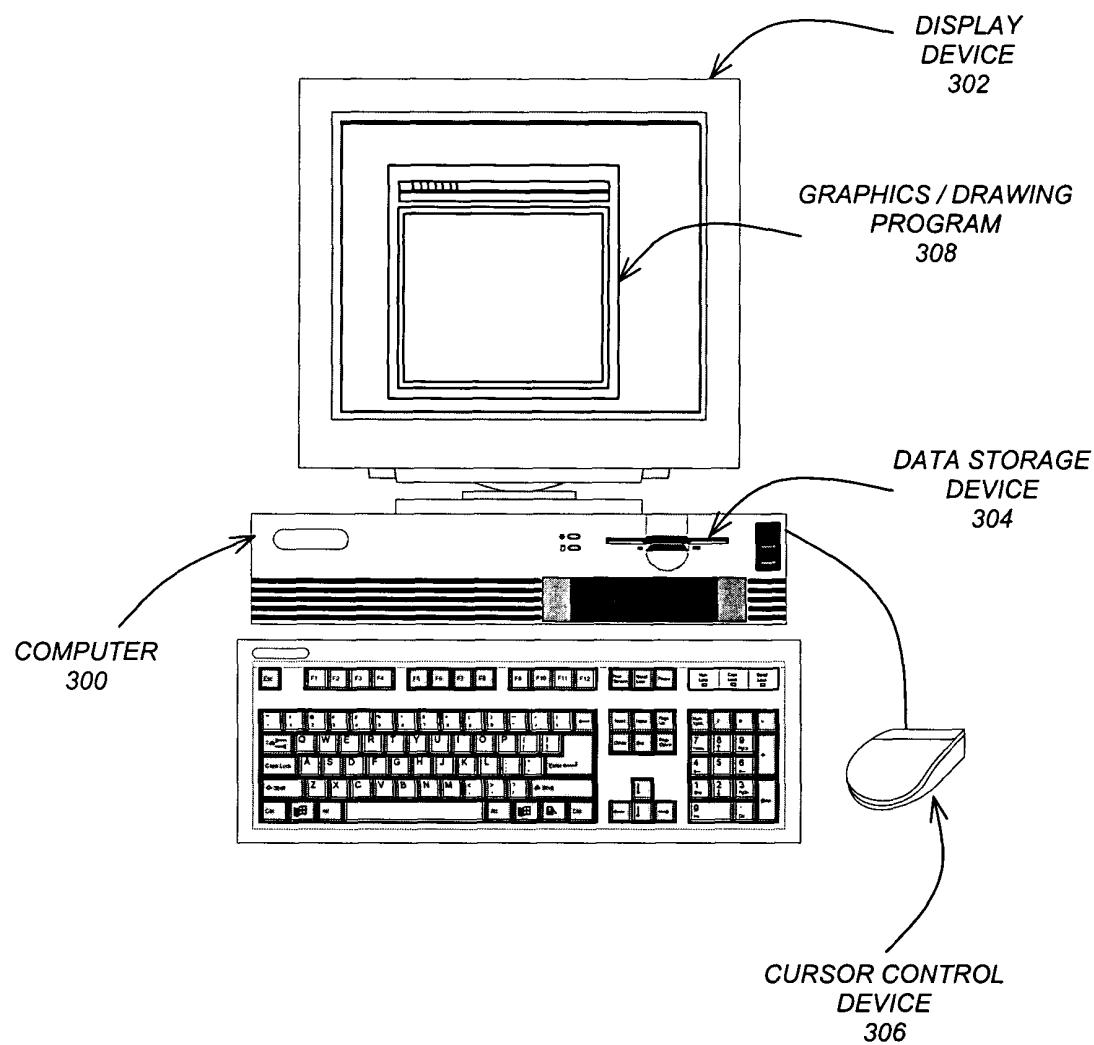


FIG. 3



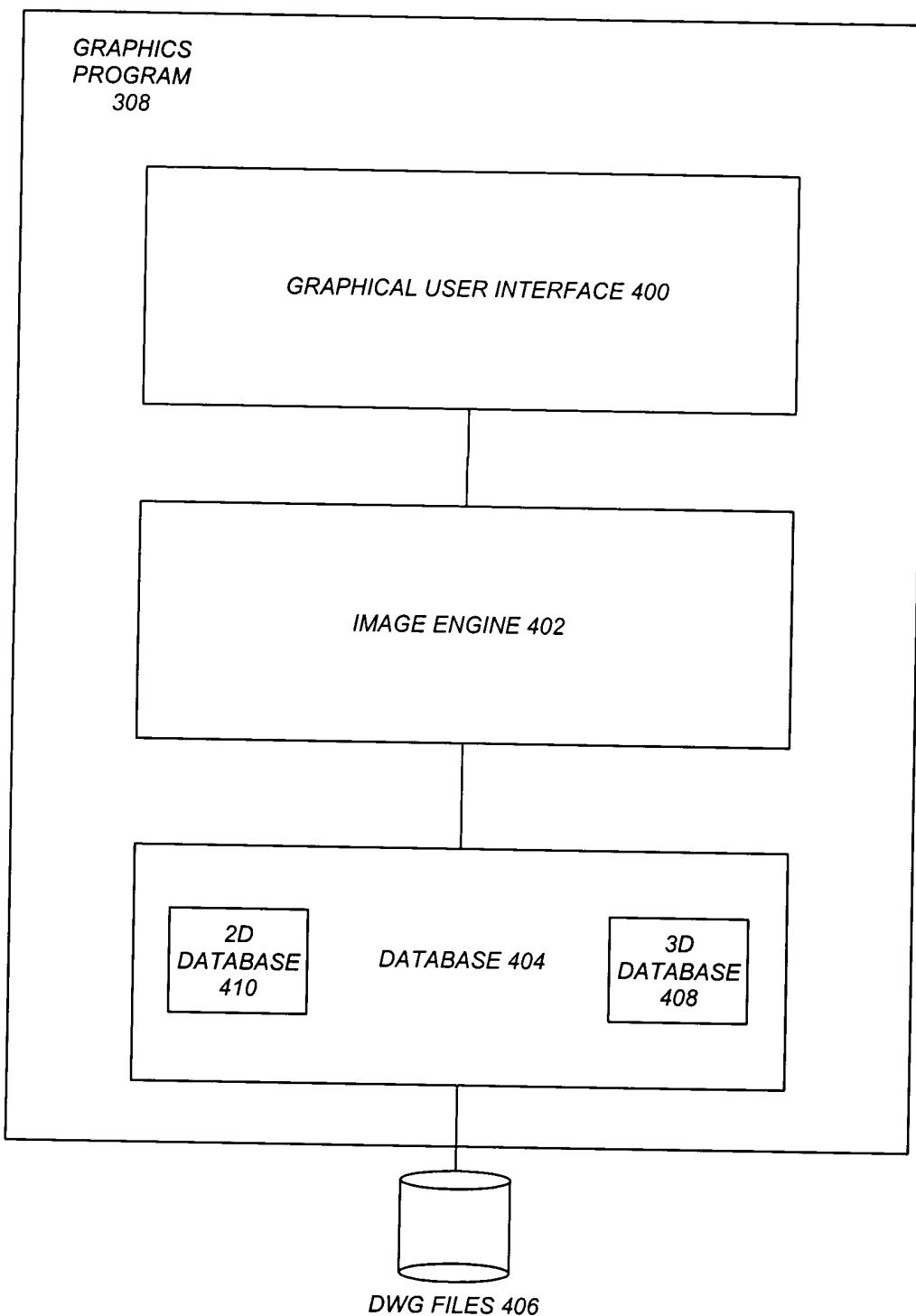


FIG. 4

3D DATABASE  
408

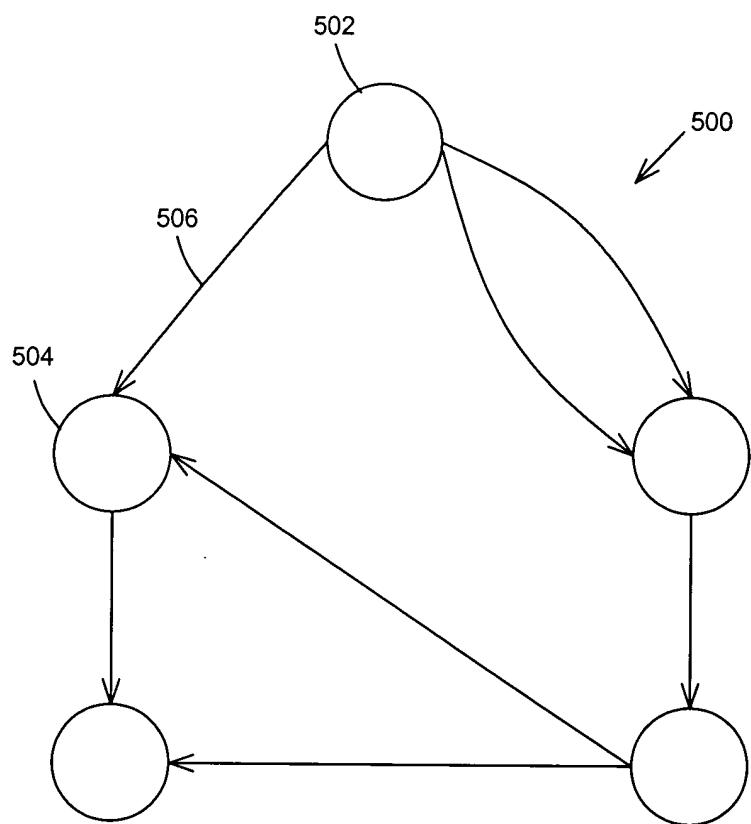
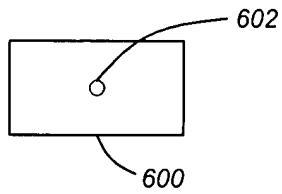
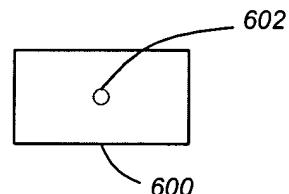


FIG. 5

*FIG. 6A*



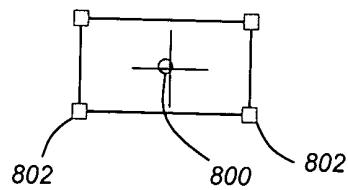
*FIG. 6B*



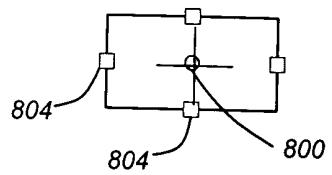
*FIG. 7*

Shape	Name	Description
◆	Diamond	Alignment to a line. e.g. —————◆—————
○	Circle	Miscellaneous.
+	Plus	Increment a value. Attach one object to another.
-	Minus	Decrement a value. Detach one object from another.
↑	Arrow	Change direction.
◎	Command (Small Circle)	Execute a miscellaneous command. 3/4 the size of a normal Circle grip so it is unobtrusive.

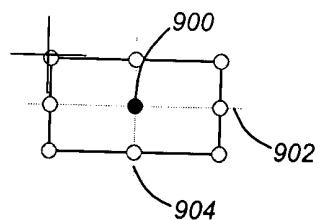
*FIG. 8A*



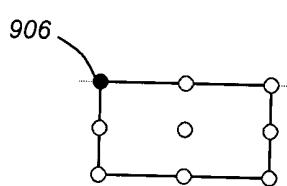
*FIG. 8B*



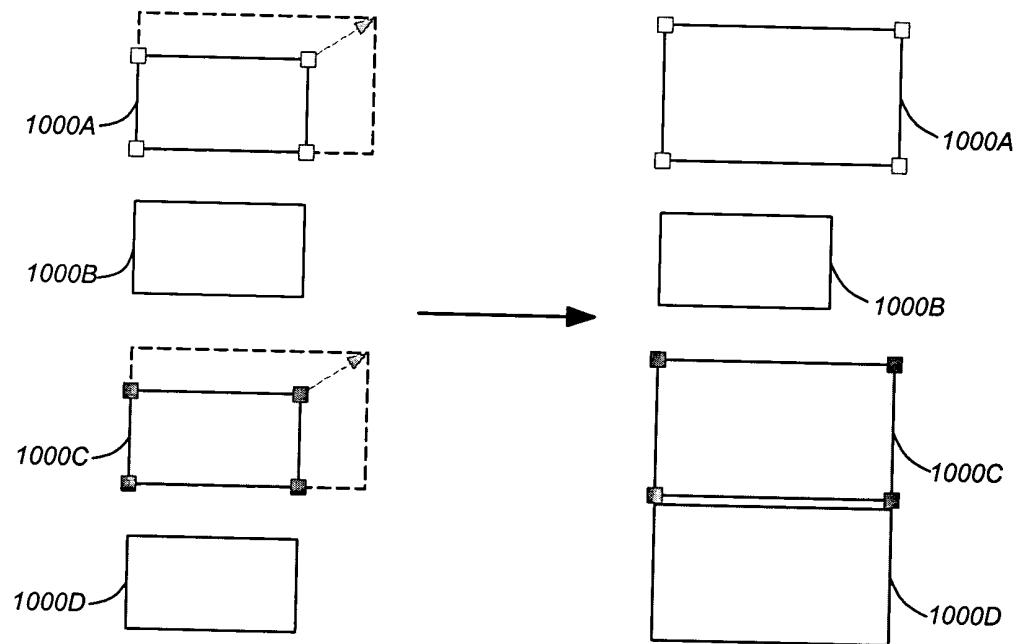
*FIG. 9A*



*FIG. 9B*



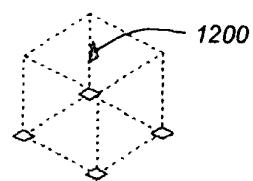
*FIG. 10*



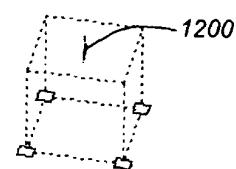
# FIG. 11

Color	Name	Description
	Object	Use to indicate that the value being edited by the grip will only affect the selected object.
	Object Light	Use for grips not in a horizontal plane, to help differentiate them from the usually more numerous horizontally oriented grips.
	Object Dark	Also used for Free Form Mass Element Face grip, for faces pointing away from the viewport.
	Secondary Object	Use to identify a set of grips on one object that is related to another object being edited. For example, if the anchor of a door in a wall is being edited, the door's grips use the Object grip color, and the grips aligned with the wall use the Secondary Object grip color.
	Style	Use to indicate that the value being edited by the grip is a style value, and will affect all objects with the same style as the selected object.
	Auxiliary	Use for miscellaneous grips that do not immediately change an object's properties. Examples: changing edit state or changing the current shape being edited.
	Auxiliary Dark	Use for Free Form Mass Element Edit Face grip, for faces pointing away from the viewport.
	Hover	The color of a grip when the user has snapped to it, but hasn't selected it. Used to provide feedback to the user when there are many grips in a small area.
	Selected	The color of a grip once it has been selected.

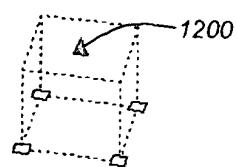
*FIG. 12A*



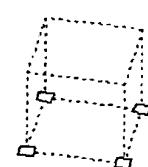
*FIG. 12B*



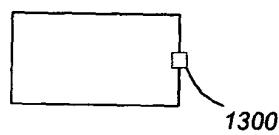
*FIG. 12C*



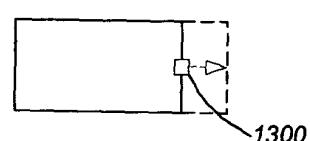
*FIG. 12D*



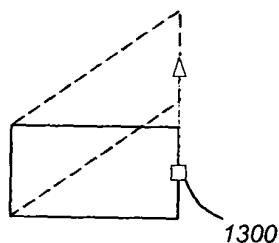
*FIG. 13A*



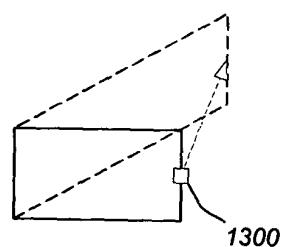
*FIG. 13B*



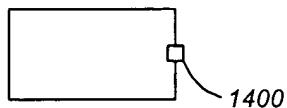
*FIG. 13C*



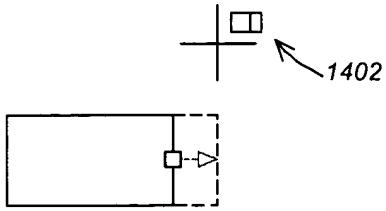
*FIG. 13D*



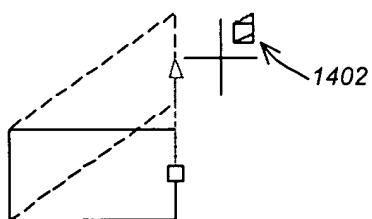
*FIG. 14A*



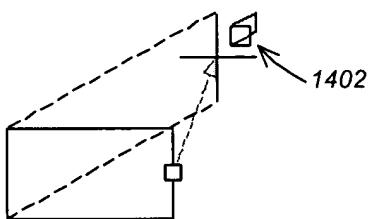
*FIG. 14B*



*FIG. 14C*



*FIG. 14D*



*FIG. 16*

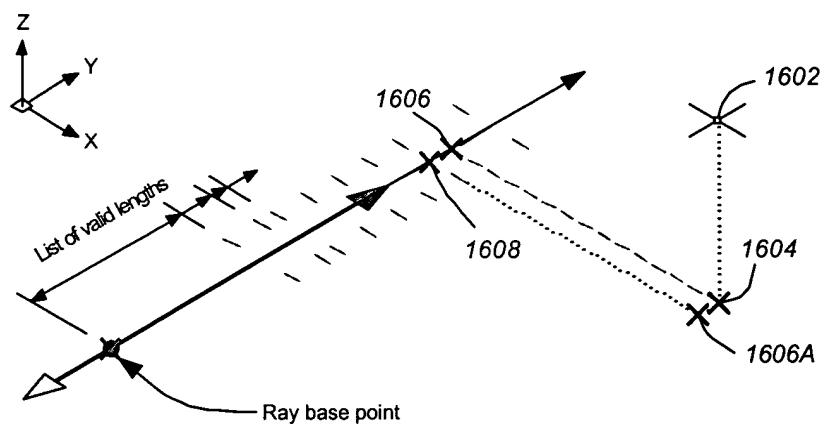


FIG. 15A

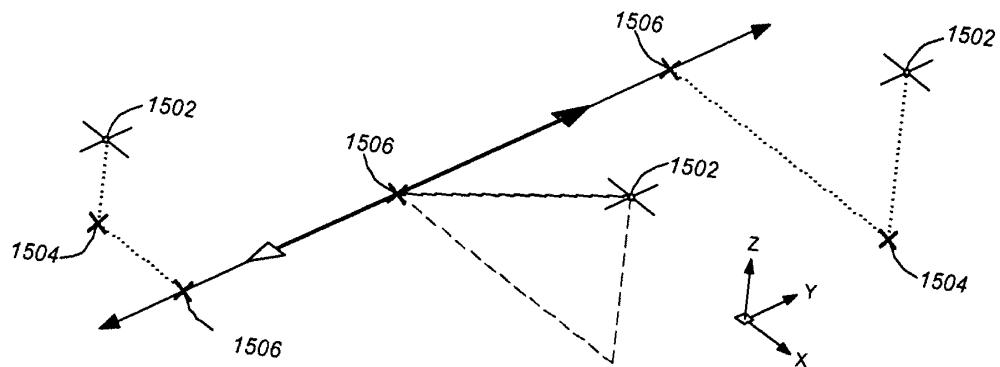


FIG. 15B

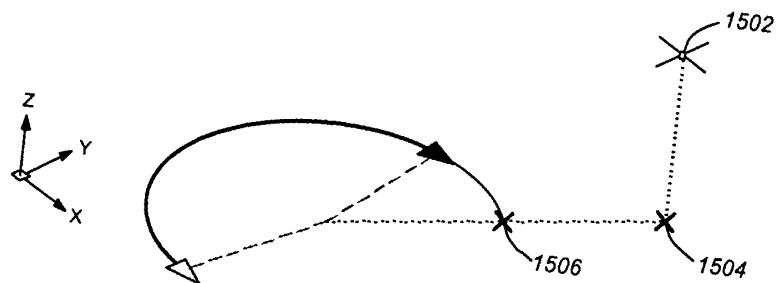


FIG. 17

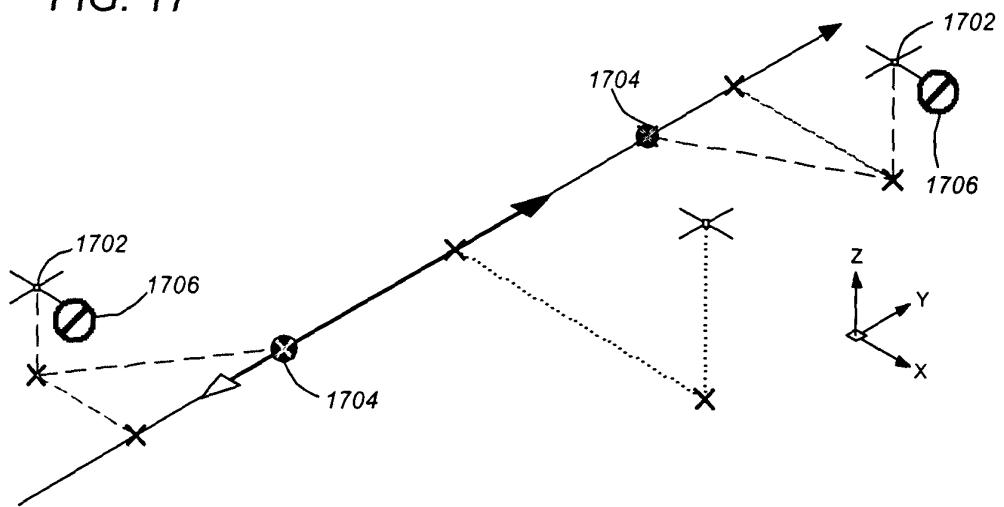


FIG. 18A

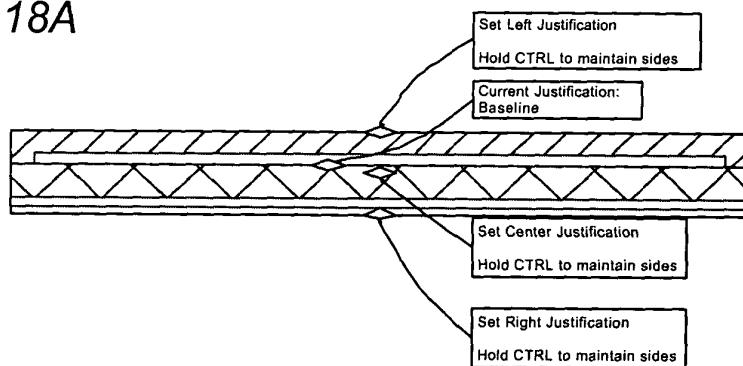
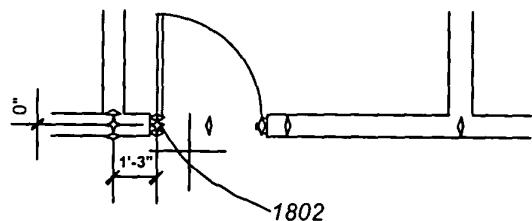
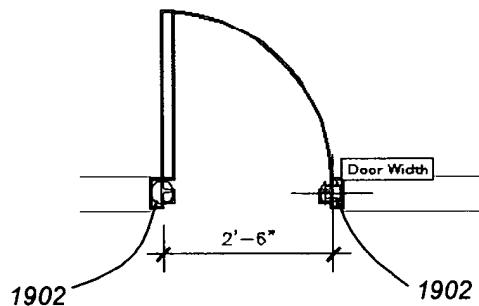


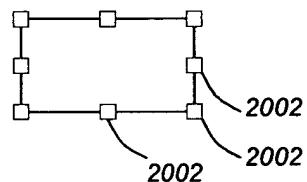
FIG. 18B



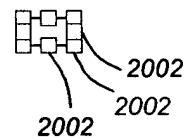
*FIG. 19*



*FIG. 20A*



*FIG. 20B*



*FIG. 20C*



FIG. 21

